

**In the Specification:**

Please amend the specification at page 9 in the paragraph starting at line 22 as follows:

The generated deterministic test pattern is loaded into the scan chains as indicated at a block 412 and then system clocks C1 CLK and C2 CLK are applied as indicated at a block 414. The scan chains are unloaded as indicated at a block 416 ~~block-316~~. A last switching latch is identified as indicated at a block 418. After these steps are repeated N times as indicated at a decision block 420, then checking for consistent results is performed as indicated at a decision block 422. If the results are consistent, then the identified last switching latch is sent to a Physical Failure Analysis (PFA) to localize the physical defect as indicated at a block 424. When the results are not consistent, then another deterministic test pattern is applied as indicated at a block 426. Then the exemplary steps are repeated.